


Web Design


Concepts of web communication will be studied and explored. Students will design, develop, and maintain web pages using appropriate current editors and/or tagging languages. Students will demonstrate technical knowledge of the equipment and an ability to use a variety of input devices, file formats, and transfer methods. Students will gain proficiency in the use of various browsers used to navigate the web and will study connectivity issues as needed. Security and privacy issues, copyright infringement, trademarks and other legal issues relating to use of the web will be studied. Career possibilities related to the Internet and web design will be explored. The students will plan, design, and maintain a web site.


Prerequisite: Must have completed one or more of the following: Desktop Publishing, Business Computer Applications, Computer Science, Computer Multimedia or Telecommunications.


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Web Design		Content Guideline													
Louisiana Business Education Related Content Standards 		Introduction and Basics	Plan the Site	Site Navigation	Tables and Forms	HTML Frames	Typography, Graphics & Color	Publish and Maintain the Site							
*All benchmarks are not marked for all Business courses.															
Standard Four: Develop attitudes, procedures, and skills necessary to function effectively in a variety of electronic offices. (Recommended Grades 10-12)															
a. Select and utilize equipment and technology appropriate for successfully completing various tasks.	•														
b. Compose and produce a variety of business documents using correct grammar, punctuation, and format with current and emerging technology.															
c. Demonstrate ability to use oral and interpersonal communications skills effectively.															
d. Use appropriate resources as needed for decision making and problem solving.	•														
e. Demonstrate knowledge of records management and application of various manual and automated data storage and retrieval systems.															
f. Use regular and electronic mail services appropriately and economically.															
g. Demonstrate appropriate personal qualities and work ethics.															
h. Demonstrate ability to use appropriate office procedures.															
i. Identify procedures involved in distributing information and products.															
j. Apply principles of effective human relations.															
Standard Five: Use Appropriate communication skills to communicate in a business environment. (Recommended Grades 11-12)															
a. Improve listening, comprehension, vocabulary, reading, and analytical skills.															
b. Apply standard rules of grammar and usage.	•						•								

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c. Improve mechanics of writing to include: capitalization, number usage, punctuation, spelling, and proofreading.		•						•									
d. Prepare and compose business communications such as: letters, memos, reports, and e-mail.		•						•									
e. Use the principles of communication psychology in oral and written communiqués.		•						•									
Standard Six: Demonstrate the ability to use standard equipment found in a variety of modern offices. (Recommended Grades 9-12)																	
a. Demonstrate ability to effectively utilize office equipment such as typewriters, computers, fax machines, postage machines, telephone systems, copying and reproducing machines, calculators, and transcription machines.	•																
b. Select and utilize equipment in decision making and problem solving.																	
Standard Fifteen: Utilize current technology and information processing concepts for personal and business applications. (Recommended Grades 10-12)																	
a. Describe current and emerging computer architecture and its impact on society.	•																
b. Identify, select, evaluate, use, install, upgrade, and customize applications software.	•	•	•	•	•	•											
c. Identify and configure hardware systems.																	
d. Develop a working knowledge of various types of operating systems and working environments.	•	•	•	•	•	•											
e. Produce documents using a variety of applications software including current word processing, database, spreadsheet, desktop publishing, and presentation graphics program.																	

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Louisiana Business Education Related Content Standards 	*All benchmarks are not marked for all Business courses.	Introduction and Basics	Plan the Site	Site Navigation	Tables and Forms	HTML Frames	Typography, Graphics & Color	Publish and Maintain the Site							
f. Select appropriate technology to address business and personal needs.		•	•	•	•	•	•	•							
g. Examine and use communications software including Internet technology for personal and business tasks.		•	•	•	•	•	•	•							
h. Identify key ethical and security issues relating to information systems.		•	•	•	•	•	•	•							
Standard Sixteen: Produce business and personal presentations using multimedia technology. (Recommended Grades 11-12)															
a. Analyze the technology available for all types of presentation use.		•	•	•	•	•	•	•							
b. Explore the types and role of presentations in business and personal settings.		•	•	•	•	•	•	•							
c. Demonstrate proficiency in oral and visual communication skills.			•					•							
d. Identify and apply design concepts for presentations.		•	•	•	•	•	•	•							
e. Investigate and apply components of effective web site design.		•	•	•	•	•	•	•							
f. Integrate presentations with clip art, graphics, pictures, sound, and video.			•		•	•		•							
g. Research the impact of emerging technology on future presentations.		•													
Standard Nineteen: Explore and use telecommunications systems. (Recommended Grades 9-12)															
a. Investigate ethical and legal standards for networking and telecommunications.		•						•							
b. Assess the development and impact of telecommunications.		•						•							
c. Define and use telecommunications and networking vocabulary.		•						•							
d. Explain the history, structure, and relevance of the Internet.		•						•							

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e. Access, navigate, and use on-line services such as e-mail, mailing lists, and newsgroups.		•	•					•							
f. Conduct research on the Internet.															
g. Discuss legal issues associated with locating and retrieving information from the Internet.		•													
h. Plan a web site and create web pages using hypertext markup language.			•				•								
i. Research the pros and cons of the various network systems used in current computer systems.															
Standard Twenty: Produce various business documents using word processing concepts and procedures. (Recommended Grades 10-12)															
a. Use appropriate format to produce mailable documents.															
b. Produce documents unique to various career fields.															
c. Create, compose, edit, store, retrieve, and print documents.															
d. Select appropriate technology for a particular task.								•							
e. Exhibit personal qualities of neatness, promptness, dependability, accuracy, and proper judgment in completing various tasks.															
f. Solve problems in document processing.															
g. Examine and use desktop publishing, presentation graphics, and multimedia software.															
h. Identify key ethical and security issues relating to information systems.		•						•							
i. Identify and configure hardware peripherals.															

Strands

Business Content Standards, Curriculum Framework, Bulletin 1977, identified seven strands. Strands are concepts common to all business courses and should be incorporated as content in all business courses. These strands are:

Career Development —Students need to explore multiple career paths and continuously deal with the process of learning new skills. Career development includes self-awareness, career research, workplace expectations, career strategies, school-to-work transitions, and lifelong learning.

1. Assess personal strengths and weaknesses as they relate to career exploration and development.
2. Utilize career resources to develop an information base on content related careers including international occupational opportunities.
3. Relate work ethic, workplace relationships, diversity, and communication skills to career development.
4. Apply knowledge gained from individual assessment to a comprehensive set of goals and an individual career plan that develops strategies to make an effective transition from school to work and includes the importance of lifelong learning to career success.
5. Discuss specific qualifications and characteristics necessary for a career in a content-related field.

Communication —Communication in all forms is a foundation skill for all business courses. Communicating clearly, fluently, strategically, technologically, critically, and creatively in society and in a variety of workplaces using reading, writing, speaking, and listening skills is an essential career and life skill.

1. Communicate in a clear, courteous, concise, and correct manner on personal and professional levels.
2. Apply basic social communication skills in personal and professional situations.
3. Use technology to enhance the effectiveness of communications.
4. Integrate all forms of communication in the successful pursuit of a career.
5. Incorporate appropriate leadership and supervision techniques, customer-service strategies, and standards of personal ethics to communicate effectively with various business constituencies.

Computation —Business education courses offer unique opportunities for students to apply computational and problem-solving skills in everyday business, personal, and consumer problems.

1. Apply mathematical operations using whole numbers, decimals, fractions, percents, ratios, and proportions to solve problems.
2. Use common international standards of measurement in solving problems.

3. Analyze and interpret data using common statistical procedures.
4. Use mathematical procedures to analyze and solve business problems for such areas as taxation, savings and investment, payroll records, cash management, financial statements, credit management, purchases, sales, inventory records, depreciation, cost recovery, and depletion.

International Business —Since business is conducted in a local, state, national, and international marketplace, students must understand how social, cultural, political, legal, and economic factors impact the business environment.

1. Explain the role of international business and analyze its impact on careers and doing business at the local, state, national, and international levels.
2. Apply communication strategies necessary and appropriate for effective and profitable international business relations.
3. Describe the social, cultural, political, legal, and economic factors that shape and impact the international business environment.
4. Describe the environmental factors that define what is considered ethical business behavior.
5. Explain the role, importance, and concepts of international finance and risk management.
6. Discuss special challenges in the operations and management of human resources in international business.
7. Apply marketing concepts to international business.
8. Relate balance of trade concepts to the import/export process.
9. Identify forms of business ownership and entrepreneurial opportunities available in international business.

Interrelationships of Business and Academics —A major component of developing a sound understanding of the modern business environment is identifying the interrelationships of business and academic skills and knowledge.

1. Analyze the interrelationships of a particular course being studied with various business content areas such as accounting, administrative support, business administration and management, economics and finance, information systems, and marketing.
2. Participate in activities that interrelate the course being studied to other business content areas to enhance general business understanding.
3. Apply knowledge and skills gained in academic courses such as English, mathematics, science, and social studies to problem solving in business education courses.
4. Participate in projects integrating academic and business skills and knowledge.

Technology —Technology is advancing at a tremendous rate. It is necessary for students to develop an understanding of the current technology available and use that knowledge in decision-making and problem-solving processes.

1. Choose appropriate procedures and equipment to complete a task or job.
2. Use the appropriate procedures for setup and operation of equipment.
3. Prevent, identify, or solve problems with equipment.
4. Research and analyze factors involved in obtaining appropriate technology.

Work Ethics and Professionalism —A high-performance workplace requires employees who demonstrate proper workplace behavior, personal attributes, and a high level of interpersonal skills.

1. Demonstrate dependability and punctuality.
2. Display initiative, enthusiasm, and a positive attitude.
3. Demonstrate good customer relations skills.
4. Operate within the scope of authority adhering to established company rules, regulations, and policies.
5. Abide by the standard dress code of the workplace.
6. Develop and adhere to appropriate interactive relationships for effective teamwork.
7. Learn to accept praise and criticism in a positive manner.
8. Accept responsibility for one's own decisions and actions.
9. Maintain and enhance skills through participation in inservice or continuing education.

Web Design Content Guideline

(The student will be able to. . .)

Unit One

Introduction and Basics

1. Identify the software used and to discriminate between other software programs that may or may not be used in the classroom.
2. Understand HTML, XML, web browsers, URLs, and bandwidth.
3. Understand and design for most browsers, including state-of-the art browsers.
4. Understand web design principles.
 - a. designing for the medium
 - b. designing the whole site
 - c. designing for the user
 - d. understand viewing patterns
 - e. designing for the screen
 - f. linking with hypertext
 - g. restricting the amount of information

Unit Two

Plan the Site

1. Identify the basic elements of the web page.
2. Create the site specification.
3. Identify the content goal.
4. Understand filenames.
5. Understand URLs.
6. Understand directory structure.
7. Diagram the site.

Unit Three

Site Navigation

1. Understand navigation principles.
2. Understand and create text-based navigation.
3. Link with text-based navigation bar, document fragments, and external document fragments.
4. Add contextual links, hyperlinks.
5. Use and create graphics-based navigation.
6. Understand and use Flash navigation.

Unit Four

Tables and Forms

1. Understand and define table basics.
2. Define and use table attributes.
3. Use design rules.
4. Create basic page template.
5. Create page banners and feature cells.
6. Understand and create tables with varying widths, spacing, columns, and cells.
7. Understand, create, and use forms.

Unit Five

HTML Frames

1. Understand frames and work with frame syntax.
2. Plan for
 - a. resizing and control scroll bars
 - b. borders and margins
 - c. screen resolution
3. Mix fixed and variable frames.

Unit Six

Typography, Graphics, and Color

1. Explore and identify type design principles.
2. Control typography with and CSS.
3. Work with style sheets.
4. Understand CSS properties and style with CSS.
5. Specify font values and block-level space values.
6. Understand and use file format basics.
7. Identify, understand, and use the basic principles of color.
8. Choose a graphics tool (ie., Photocopy, Paintshop, etc.).
9. Use the element.
10. Understand, create, and use digital photography.
11. Specify width and height, alignment, white space, and background images.
12. Use transparent space GIFs and single-pixel rules.

Unit Seven

Publish and Maintain the Site

1. Choose an ISP.
2. Use the file transfer protocol to upload files and a popular software program's uploading feature (ie., FrontPage or MicrSoft's Word or PowerPoint).
3. Test the site.
4. Conduct user testing, refine, and update the content.
5. Work with search engines.

Resources

Todd Knowlton, Jay Bates and Brad Hunt, *Webmastering BASICS Using Macromedia Dreamweaver MX*. Course Technology, 2003.

Joel Sklar, *Designing Web Sites*. Course Technology, 2001.

Shelly Cashman Mick, *FrontPage 2000*. Course Technology. 2000

Mark Ciampa, *Microsoft FrontPage 2000*. South-Western Educational Publishing, 2000.

Todd Stubbs, Karl Barksdale, and Patrick Crispen, *Web Page Design*. South-Western Educational Publishing, 2000.

Chris Katsaropoulos and Catherin Skintik, *Learning to Create a Web Page with Microsoft Office 2000*. DDC Publishing, 1999.

Nancy Stevenson, *Learning E-Commerce Business Analysis & Design*. DDC Publishing, 2001.

Internet Sites

www.mainfunction.com Microsoft MainFunction. The purpose is to promote the exchange of ideas, resources, and information regarding current technology.

www.secondspin.com SecondSpin. Commercial site dealing with CD's and DVD's.

www.svs.com SVS Internet Corporation. Business web hosting information.

www.videosoft.com Component One. Development and authoring tools for web pages.

<http://www.webtechniques.com/archives/2001/12/desi/> "14 Ways to Talk Clients Out of Ruining Their Sites." New Architect: Internet Strategies for Technology Leaders

<http://hotwired.lycos.com/webmonkey/98/03/index0a.html> Webmonkey: Web Developer's Resource.